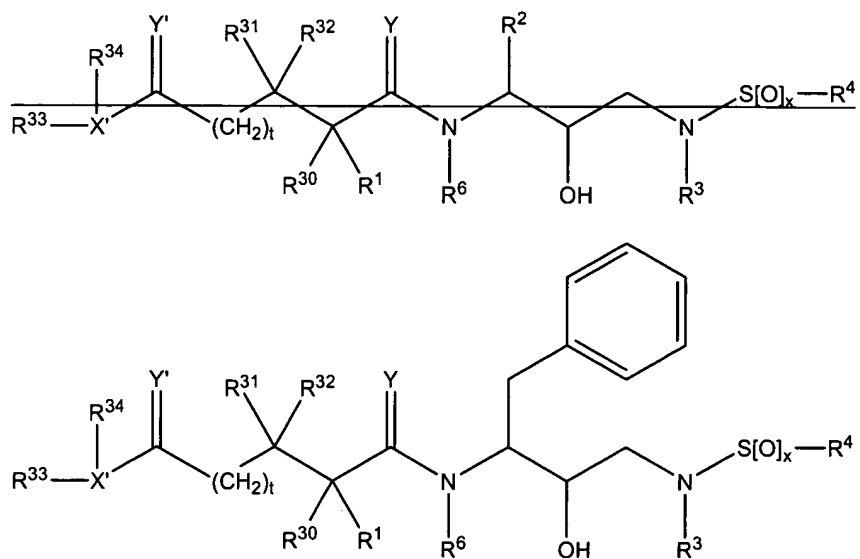


This Listing of Claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

Claim 1 (currently amended): A compound represented by the formula:



or a pharmaceutically acceptable salt, prodrug, or ester thereof wherein:

x represents 0, 1 or 2;

t represents either 0 or 1;

R^1 represents hydrogen, $-CH_2SO_2NH_2$, $-CO_2CH_3$, $-CONHCH_3$, $-CON(CH_3)_2$, $-CH_2C(O)NHCH_3$, $-CH_2C(O)N(CH_3)_2$, $-CONH_2$, $-C(CH_3)_2(SH)$, $-C(CH_3)_2(SCH_3)$, $-C(CH_3)_2(S[O]CH_3)$, $-C(CH_3)_2(S[O]_2CH_3)$, alkyl, haloalkyl, alkenyl, alkynyl and cycloalkyl radicals and amino acid side chains selected from asparagine, S-methyl cysteine and the corresponding sulfoxide and sulfone derivatives thereof, glycine, leucine, isoleucine, allo-isoleucine, tert-leucine, phenylalanine, ornithine, alanine, norleucine, glutamine, valine, threonine, serine, o-alkyl serine, aspartic acid, beta-cyano alanine, and allothreonine side chains;

~~R² represents alkyl, aryl, cycloalkyl, cycloalkylalkyl and aralkyl radicals, which radicals are optionally substituted with a group selected from halogen and alkyl radicals, NO₂, C=N, CF₃, R⁹ and SR⁹, wherein R⁹ represents hydrogen and alkyl radicals;~~

R³ represents hydrogen, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl and mono- and disubstituted aminoalkyl radicals, wherein said substituents are selected from alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl, and heterocycloalkylalkyl radicals, or in the case of a disubstituted aminoalkyl radical, said substituents along with the nitrogen atom to which they are attached, form a heterocycloalkyl or a heteroaryl radical;

X' represents N, O, and C(R¹⁷) wherein R¹⁷ represents hydrogen and alkyl radicals;

Y and Y', independently represent O, S and NR¹⁵ wherein R¹⁵ represents hydrogen and radicals as defined for R³ ;

R⁴ represents radicals as defined by R³ except for hydrogen;

R⁶ represents hydrogen and alkyl radicals;

R³⁰, R³¹ and R³² represent radicals as defined for R¹, or one of R¹ and R³⁰ together with one of R³¹ and R³² and the carbon atoms to which they are attached form a cycloalkyl radical; or R³⁰ and R³² together with the carbon atoms to which they are attached form a three to six-membered cycloalkyl radical; and

R³³ and R³⁴ independently represent hydrogen, radicals as defined for R³, or R³³ and R³⁴ together with X' represent cycloalkyl, aryl, heterocyclyl and heteroaryl radicals, provided that when X' is O, R³⁴ is absent.

Claims 2-65 (canceled)

Claim 66 (currently amended): A pharmaceutical composition comprising a the compound of Claim 1 and a pharmaceutically acceptable carrier.

Claim 67 (canceled)

Claim 68 (currently amended): A Method of inhibiting a retroviral protease comprising administering a protease inhibiting amount of a the composition of Claim 66.

Claim 69 (currently amended): The Method of Claim 68 wherein the retroviral protease is HIV protease.

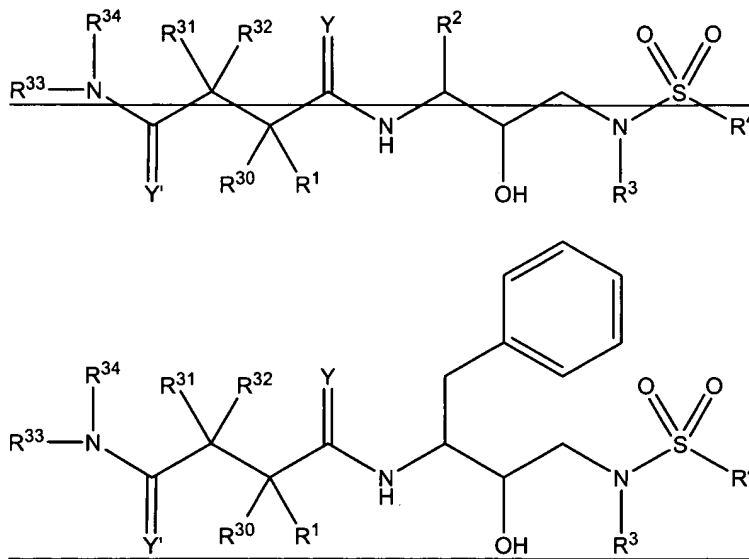
Claim 70 (currently amended): A Method of treating a retroviral infection comprising administering an effective amount of a the composition of Claim 66.

Claim 71 (currently amended): The Method of Claim 70 wherein the retroviral infection is an HIV infection.

Claim 72 (currently amended): A Method for treating AIDS comprising administering an effective amount of a the composition of Claim 66.

Claims 73-77 (canceled)

Claim 78 (currently amended): A Compound represented by the formula:



or a pharmaceutically acceptable salt, prodrug, or ester thereof wherein:

R^1 represents hydrogen, $-\text{CH}_2\text{SO}_2\text{NH}_2$, $-\text{CO}_2\text{CH}_3$, $-\text{CONHCH}_3$, $-\text{CON}(\text{CH}_3)_2$, $-\text{CH}_2\text{C}(\text{O})\text{NHCH}_3$, $-\text{CH}_2\text{C}(\text{O})\text{N}(\text{CH}_3)_2$, $-\text{CONH}_2$, $-\text{C}(\text{CH}_3)_2(\text{SH})$, $-\text{C}(\text{CH}_3)_2(\text{SCH}_3)$, $-\text{C}(\text{CH}_3)_2(\text{S}[\text{O}]\text{CH}_3)$, $-\text{C}(\text{CH}_3)_2(\text{S}[\text{O}]_2\text{CH}_3)$, alkyl, haloalkyl, alkenyl, alkynyl and cycloalkyl radicals and amino acid side chains selected from asparagine, S-methyl cysteine and the corresponding sulfoxide and sulfone derivatives thereof, glycine, leucine, isoleucine, allo-isoleucine, tert-leucine, phenylalanine, ornithine, alanine, norleucine, glutamine, valine, threonine, serine, o-alkyl serine, aspartic acid, beta-cyano alanine, and allothreonine side chains;

~~R^2 represents alkyl, aryl, cycloalkyl, cycloalkylalkyl and aralkyl radicals, which radicals are optionally substituted with a group selected from halogen and alkyl radicals, NO_2 , $\text{C}=\text{N}$, CF_3 , R^9 and SR^9 , wherein R^9 represents hydrogen and alkyl radicals;~~

R³ represents hydrogen, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl and mono- and disubstituted aminoalkyl radicals, wherein said substituents are selected from alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl, and heterocycloalkylalkyl radicals, or in the case of a disubstituted aminoalkyl radical, said substituents along with the nitrogen atom to which they are attached, form a heterocycloalkyl or a heteroaryl radical;

R⁴ represents radicals as defined by R³ except for hydrogen;

R³⁰, R³¹ and R³² represent radicals as defined for R¹, or one of R¹ and R³⁰ together with one of R³¹ and R³² and the carbon atoms to which they are attached form a cycloalkyl radical; and

R³³ and R³⁴ independently represent hydrogen, radicals as defined for R³, or R³³ and R³⁴ together with the nitrogen atom to which they are attached represent heterocycloalkyl and heteroaryl radicals; and

Y and Y', independently represent O, S and NR¹⁵ wherein R¹⁵ represents hydrogen and radicals as defined for R³.

Claims 79-125 (canceled)

Claim 126 (currently amended): A pharmaceutical composition comprising a the compound of Claim 78 and a pharmaceutically acceptable carrier.

Claim 127 (currently amended): A ~~M~~method of inhibiting a retroviral protease comprising administering a protease inhibiting amount of a the composition of Claim 126.

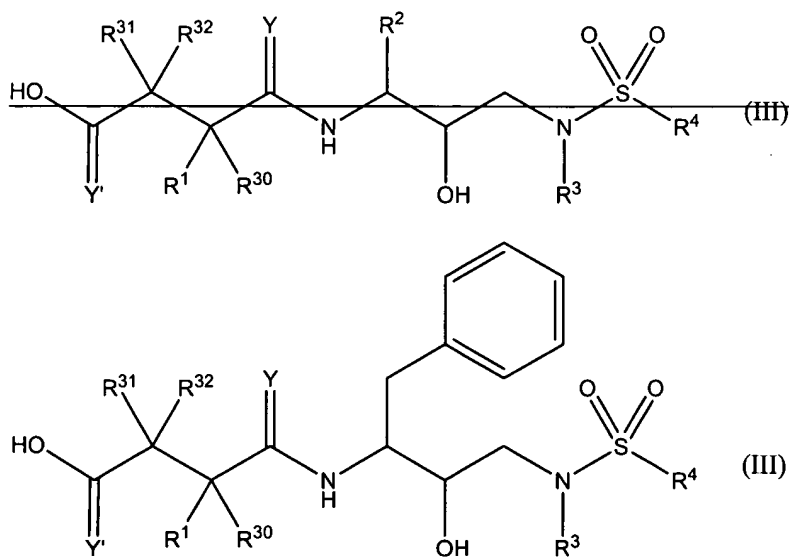
Claim 128 (currently amended): The ~~M~~method of Claim 127 wherein the retroviral protease is HIV protease.

Claim 129 (currently amended): A ~~M~~ethod of treating a retroviral infection comprising administering an effective amount of a the composition of Claim 126.

Claim 130 (currently amended): The ~~M~~ethod of Claim 129 wherein the retroviral infection is an HIV infection.

Claim 131 (currently amended): A ~~M~~ethod for treating AIDS comprising administering an effective amount of a the composition of Claim 126.

Claim 132 (currently amended): A ~~C~~ompound represented by the formula:



or a pharmaceutically acceptable salt, prodrug, or ester thereof wherein:

R¹ represents hydrogen, -CH₂SO₂NH₂, -CO₂CH₃, -CONHCH₃, -CON(CH₃)₂, -CH₂C(O)NHCH₃, -CH₂C(O)N(CH₃)₂, -CONH₂, -C(CH₃)₂(SH), -C(CH₃)₂(SCH₃), -C(CH₃)₂(S[O]CH₃), -C(CH₃)₂(S[O]₂CH₃), alkyl, haloalkyl, alkenyl, alkynyl and cycloalkyl radicals and amino acid side chains selected from asparagine, S-methyl cysteine and the corresponding sulfoxide and sulfone derivatives thereof, glycine, leucine, isoleucine, allo-isoleucine, tert-leucine, phenylalanine, ornithine, alanine, norleucine, glutamine, valine,

threonine, serine, o-alkyl serine, aspartic acid, beta-cyano alanine, and allothreonine side chains;

~~R² represents alkyl, aryl, cycloalkyl, cycloalkylalkyl and aralkyl radicals, which radicals are optionally substituted with a group selected from halogen and alkyl radicals, NO₂, C≡N, CF₃, R⁹ and SR⁹, wherein R⁹ represents hydrogen and alkyl radicals;~~

R³ represents hydrogen, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl and mono- and disubstituted aminoalkyl radicals, wherein said substituents are selected from alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl, and heterocycloalkylalkyl radicals, or in the case of a disubstituted aminoalkyl radical, said substituents along with the nitrogen atom to which they are attached, form a heterocycloalkyl or a heteroaryl radical;

Y and Y', independently represent O, S and NR¹⁵ wherein R¹⁵ represents hydrogen and radicals as defined for R³;

R⁴ represents radicals as defined by R³ except for hydrogen; and

R³⁰, R³¹ and R³² represent radicals as defined for R¹, or one of R¹ and R³⁰ together with one of R³¹ and R³² and the carbon atoms to which they are attached form a cycloalkyl radical; or R³⁰ and R³² together with the carbon atoms to which they are attached form a cycloalkyl radical.

Claims 133-166 (canceled)

Claim 167 (currently amended): A pharmaceutical composition comprising a the compound of Claim 132 and a pharmaceutically acceptable carrier.

Claim 168 (currently amended): A ~~M~~method of inhibiting a retroviral protease comprising administering a protease inhibiting amount of a the composition of Claim 167.

Claim 169 (currently amended): The ~~M~~method of Claim 168 wherein the retroviral protease is HIV protease.

Claim 170 (currently amended): A ~~M~~method of treating a retroviral infection comprising administering an effective amount of a the composition of Claim 167.

Claim 171 (canceled)

Claim 172 (currently amended): A ~~M~~method for treating AIDS comprising administering an effective amount of a the composition of Claim 167.

Claim 173 (canceled)